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#### FILED ELECTRONICALLY

November 10, 2008

Sandra J. Paske Secretary to the Commission Public Service Commission of Wisconsin 610 North Whitney Way P.O. Box 7854 Madison, WI 53707-7854

RE: Investigation to Assess Wisconsin's Potential for the Development of Wind Energy Resources in Lake Michigan and Lake Superior

## **Docket 05-EI-144**

Dear Ms. Paske,

Enclosed for filing are the comments of Wisconsin Electric Power Company in the above matter.

Please direct any questions to Heather Leibham at 414.221.4231.

Sincerely,

Roman A. Draba

Vice President - Regulatory Affairs and Policy

# BEFORE THE PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation to Assess Wisconsin's Potential for the Development of Wind Energy Resources in Lake Michigan and Lake Superior

5-EI-144

#### COMMENTS OF WISCONSIN ELECTRIC POWER COMPANY

Wisconsin Electric Power Company ("Company" or "Wisconsin Electric") appreciates the opportunity to provide comments on the Public Service Commission of Wisconsin's draft document "Harnessing Wisconsin's Energy Resources: An Initial Investigation into Great Lakes Wind Development" ("draft report" or "report"). Wisconsin Electric commends the Study Group for a very thorough and detailed report. The Company agrees with the statements contained in Section 8 of the draft report that this is a "first step in the State's investigation of the potential for wind generation on the Great Lakes" and that the "pursuit of such projects will require the State to make definitive policy choices." With that as its backdrop, the Company offers the following comments.

#### Executive Summary – Evaluation of Transmission Infrastructure

On page 12, the report concludes that "developing a transmission line parallel to Lake Michigan, either off-shore or on land, not only would help to support the development of off-shore wind projects but it would also help to better serve Wisconsin's existing load centers." It is not clear whether or not this statement is supported by ATC or MISO studies.

Based on its experience, the Company has identified three basic choices for policy makers on where the state of Wisconsin is able to procure new wind energy. Wisconsin-based terrestrial wind generation can be generally characterized as having lower productivity coupled with lower transmission investment costs. Plains states-based terrestrial wind generation can be generally characterized as having high productivity but very high transmission investment costs. Lastly, off-shore wind generation generally will have high productivity but many other concerns as the report points out. The comparison of off-shore vs. terrestrial wind projects that begins on page 13 does not make clear whether the terrestrial wind projects are located in Wisconsin or in the plains states, nor is it clear whether the terrestrial options include the cost of transmission.

## Section 4: Cost and Financing of Wind Energy

The Study Group correctly notes on pages 74 and 76 that the proposal to require securitization financing would require a change in state statute. The authors mention that pollution control equipment is currently the only property allowed by state statute to be financed with securitization. However, the authors neglect to mention that current Internal Revenue Service rules allow only public utilities to use this type of financing. Additionally, the current statute places the decision to finance with this type of financial instrument solely at the discretion of utility management. From the Company's perspective, three items would need to occur before this financing would be contemplated for water-based wind:

- 1) The state law would have to be changed to allow for water-based wind to be financed in this way;
- A public utility that submits an application for a Certificate of Public Convenience and Necessity for a water-based wind project would have to propose and seek this type of financing; and
- 3) The financial markets would have to support the ultimate issuance of this security. Given the current credit crisis in the debt markets this is not a certainty.

There are additional concerns with the use of securitization for a water-based wind project. The average life of securitized debt is typically 7 to 8 years with a typical maximum term of 15 years. The average life of a wind asset is typically 25-26 years. Repaying 100% of the principle almost twice as fast as a normal rate-based asset will reduce and possibly eliminate any "cost savings" identified from the change in capital structure. Other questions that would need to be addressed include:

Which party is responsible for the risk of constructing and operating the wind asset?

What happens to any potential cost increases?

What happens if the project comes in under budget?

Is the financing done after the plant is in-service or prior to construction?

If the financing occurs prior to in-service of the units and costs increase, how would the increased costs be treated?

Pursuing this type of financing option for water-based wind is very problematic and may not have any practical financial market application. At a minimum the questions listed above and many others would need to be answered before proceeding down this type of financing path.

### Section 6: Legal Considerations for Off-Shore Wind Developments

This section presents a thorough summary of the various state, federal and tribal statutes, rules, regulations and cases that might be applicable to a proposal to construct an off-shore wind project in Lake Michigan or Lake Superior. We have not identified any legal authorities that we believe are missing from this discussion.

provisions of Wis. Stat. ch. 30. For purposes of these comments, we have not taken issue with any of those interpretations, but reserve the right to do so in any future docket or with respect to a particular application or set of facts.

<sup>&</sup>lt;sup>1</sup> Some of the sections simply state what the statute requires, others explain what the statute requires and offer an interpretation as to whether an off-shore wind project could meet those requirements. For example, WDNR regularly expresses concern as to whether off-shore wind turbines could meet the public interest test under various

However, given the apparent significance of concerns about avian and bat impacts, the state and federal legal authorities related to avian and bat impacts could be more clearly spelled out in this Section 6. Applications are often deemed incomplete, projects are approved with conditions that require pre- and post- construction avian and bat studies, and project decisions consider impacts to bird and bat populations. It would be helpful to identify the regulatory parameters related to potential avian and bat impacts that need to be satisfied in order to gain project approval.

The text makes clear (pp. 111-112) that the Wisconsin Department of Natural Resources (WDNR) is uncertain whether the existing state laws and rules dealing with the placement of structures on the beds of navigable waters would support issuance of permits or approvals for placement of wind turbines. In light of that uncertainty, we concur with the ultimate recommendation that the Legislature specifically address the process and criteria for siting and permitting off-shore wind projects in order to provide a clear path for such projects and to avoid the risks and delays associated with differences in interpretation.

The discussion of the federal laws and approvals also demonstrates that the federal process is a complicated one, with significant opportunity for uncertainty and the resulting risks and delays. To that end, it is also important to have a clear process at the federal level and we concur that having a federal lead agency is appropriate. Whether that can be accomplished by something short of federal legislation, such as a federal executive order or memorandum of agreement, is unclear to us at this point.

#### Section 8: Next Steps

The most significant environmental uncertainty appears to be about potential avian and bat impacts. Relatively little is known about bird and bat distribution, abundance, behaviors and

movements over and on the Great Lakes and more information is needed in order to estimate potential impacts. We endorse development of a research proposal and believe that some or all of this data collection plan needs to be implemented in order to evaluate potential avian and bat impacts. We agree that Section 5 accurately identifies the most important questions that need to be addressed. Potential avian and bat impacts are key environmental information gaps, and should be added to the information to be collected under Section 8.1, Information gaps. The Company recommends that the need to conduct avian and bat studies be identified as a next step, instead of leaving this research up to individual developers as part of a subsequent project application process.

The value of a generic environmental impact statement is not clear given the effort that would be needed to develop one. Instead, it may be more efficient to address key information gaps through data collection and analysis activities.